



Passive Solutions for Improved 5G Indoor/Outdoor Coverage

NANOWEB® Revolutionary Transparent Conductive Films

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NASDAQ: MMAT

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Transparent Window Film Transforms Outdoor 5G Coverage



Transparent
Window Film

META®



Window Film Enhances Signal Penetration Through Glass



Transparent Passive 5G Reflector

META®

PROBLEM:

Highest-speed 5G signals need line of sight, requiring placement of many small cells

SOLUTION:

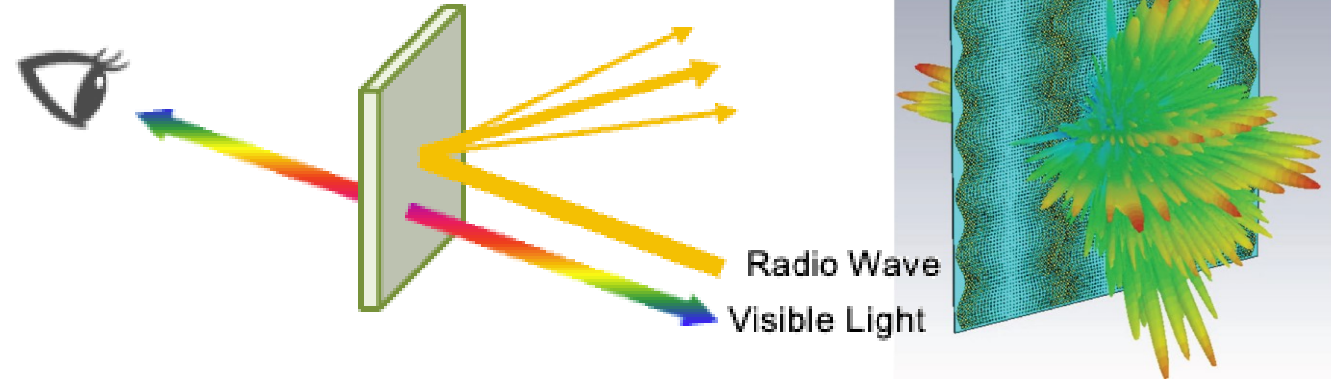
META's transparent window film reflects signal to cover outdoor/indoor dead zones, passively.

IMPACT:

Faster and less expensive to deploy, reduces energy use.

BENEFITS:

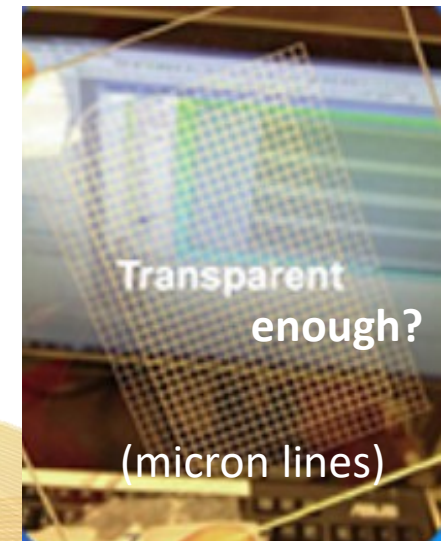
The solution can be applied anywhere, with no power supply, without spoiling the surface's appearance, to improve the communication environment. Easy to deploy and retrofit. No regulatory hurdles and planning permissions. Reduces 2-10x the need for repeaters (indoor & outdoor).



NANOWEB® Patented 5G Smart Material – full angle control



VS.



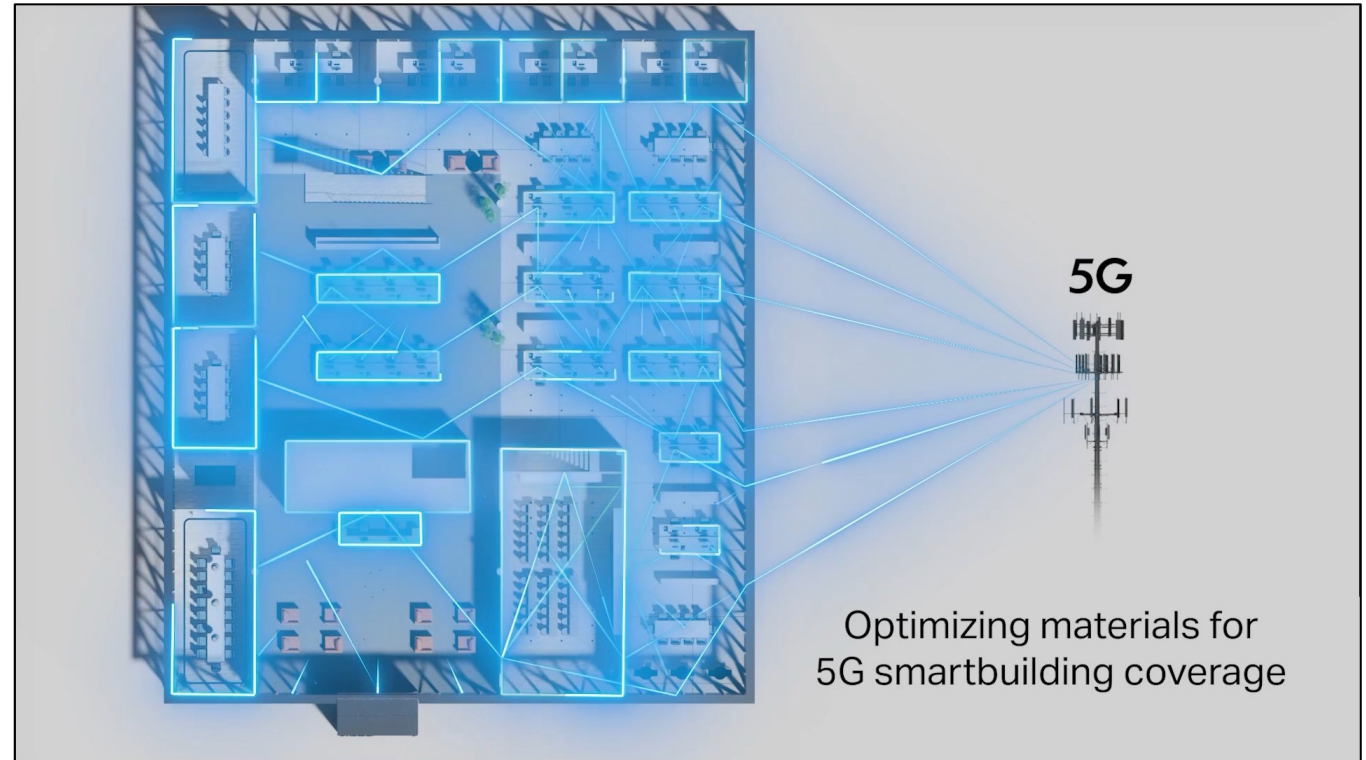
NANOWEB® Reflector Performance Solution



This live demonstration shows that a NANOWEB® transparent reflector perfectly matches the signal performance of solid aluminum plate.

Moreover, the design-specific angle of reflection allows NANOWEB® installations to be optimized for signal propagation within a particular building.

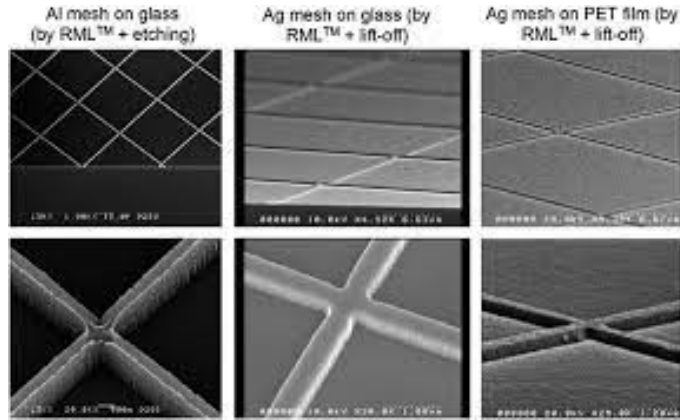
Improved coverage, without spoiling the décor or blocking the view.



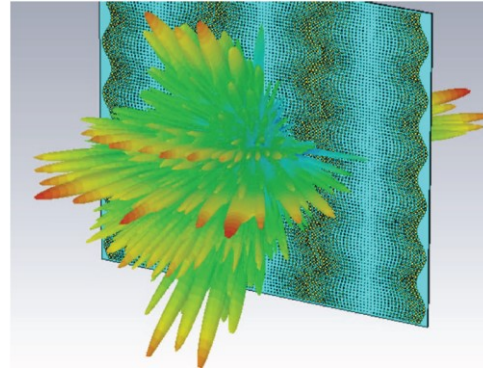
View the full video [here](#)

Software-Driven Design Enables Rapid Innovation

Gen 3 – R2R Proprietary Mfg.
World's 1st Sub-micron Metal Mesh



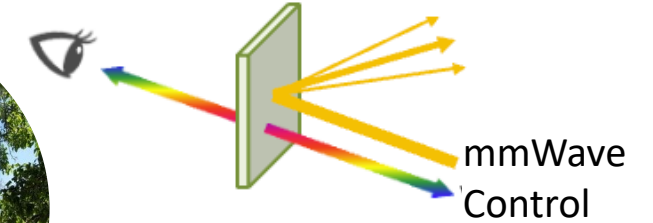
META proprietary designs
5G enabled/6G scalable



Transparent,
Cost effective



Low Loss, High
Performance



Many reflection modes can be accomplished

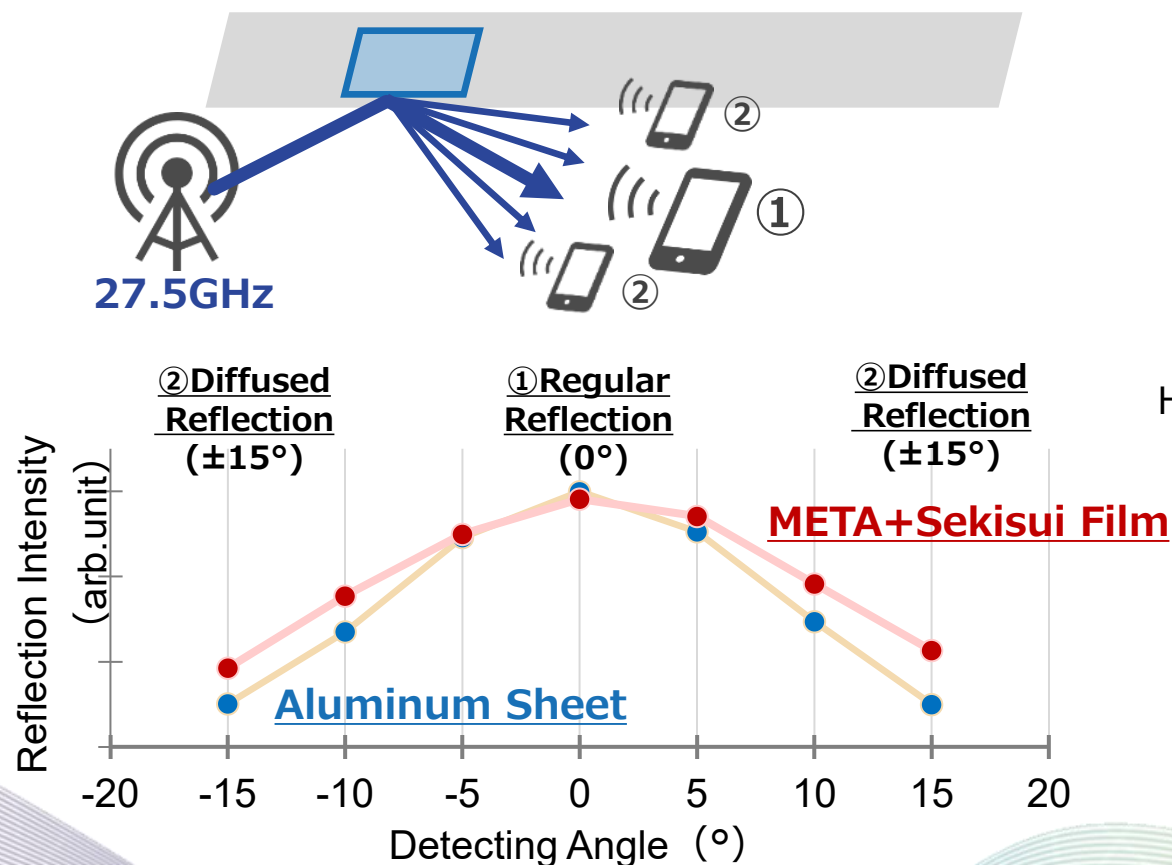
Passive (today) and Active (i.e. reconfigurable, future solutions)



Performance Verified by Sekisui Chemical

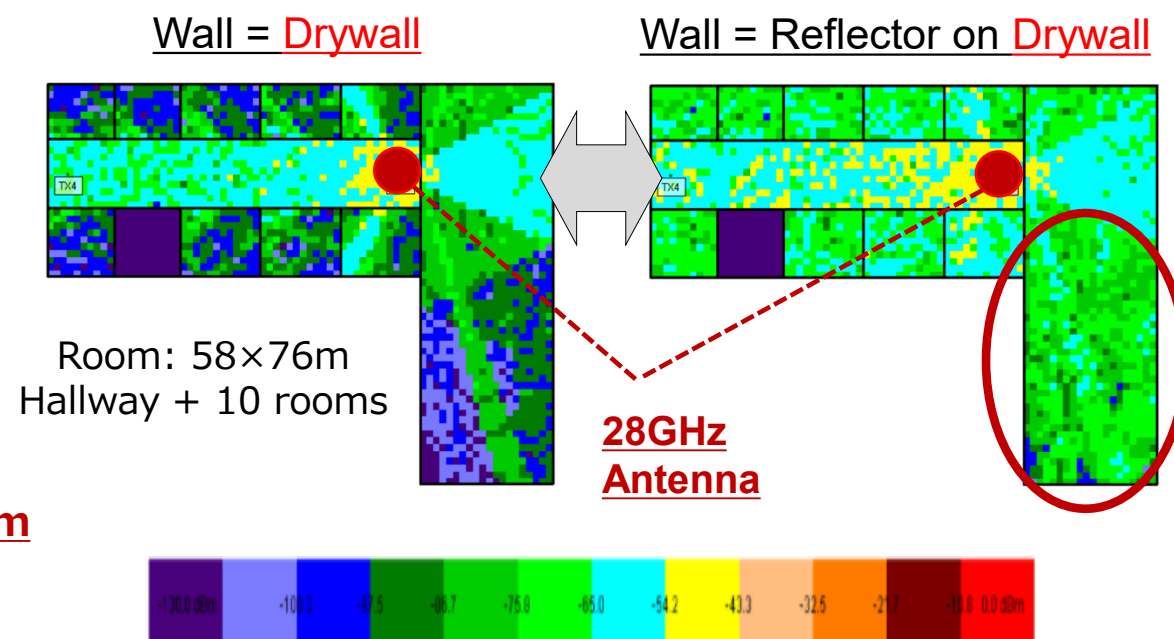
META®

1. Passive Reflection Benefits



META's Nanoweb® + Sekisui's interlayer film superior performance to solid aluminum sheets

2. Connection Improvements by Design



In partnership with
SEKISUI

Case Study: Connection coverage area was extended with reflective passive film solution

META's Global Presence



Halifax, Nova Scotia, Canada

Global HQ

R&D and Integrated Applications

Product Dev. & Low vol. manufacturing

London, United Kingdom

EU Sales

Research and Development

Pleasanton, California, United States

NA Sales

Product Design and R&D

Burnaby, BC, Canada

Product Design and R&D

Thurso, PQ, Canada

High Vol. Manufacturing

Steinhausen, Switzerland

EU Sales

Product Design and R&D

ISO 9001 Quality Management System

2021 LUX INNOVATOR OF THE YEAR AWARDS
WINNER: META MATERIALS INC.



A SUSTAINABLE SOLUTION FROM
THE PROMISE OF 5G IN DENSE
URBAN ENVIRONMENTS



Please contact us for more information
and samples

Meet META & Sekisui in Barcelona



META[®]
Go Beyond.

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